

WHAT IS CLAIMED IS:

1. A driving circuit for driving a liquid-crystal display having a matrix of first signal lines aligned in one direction and second signal lines aligned in another direction, a plurality of switching elements controlled by the first signal lines, disposed at intersections of the first signal lines with the second signal lines, and a plurality of liquid-crystal capacitors disposed at said intersections and coupled through said switching elements to the second signal lines, comprising:

a plurality of first drivers for sequentially driving said first signal lines to active and inactive levels, thereby switching said switching elements on and off at certain transition times;

a plurality of second drivers for driving said second signal lines with signals representing picture-element intensities; and

a switching circuit coupled to a plurality of signal lines among said first signal lines and said second signal lines, for disconnecting at least two of said signal lines from respective drivers among said first drivers and said second drivers during said transition times, and placing the signal lines thus disconnected in a short-circuited state.

2. The driving circuit of claim 1, wherein said switching circuit disconnects all of said second signal lines from said second drivers during all of said transition times.

3. The driving circuit of claim 2, wherein said switching circuit short-circuits said second signal lines, when disconnected from said second drivers, to a fixed potential.

4. The driving circuit of claim 3, wherein said fixed

potential is a common potential applied to said liquid-crystal capacitors.

5. The driving circuit of claim 3, wherein said second drivers drive said second signal lines alternately above and below said fixed potential.

6. The driving circuit of claim 3, wherein said switching circuit has a plurality of resistors, and couples said second signal lines to said fixed potential through said resistors.

7. The driving circuit of claim 2, wherein said switching circuit short-circuits each one of said second signal lines to an adjacent one of said second signal lines.

8. The driving circuit of claim 7, wherein said second drivers drive mutually adjacent second signal lines in mutually opposite directions from a certain center potential.

9. The driving circuit of claim 7, wherein said switching circuit short-circuits all mutually adjacent pairs of said second signal lines.

10. The driving circuit of claim 7, wherein said switching circuit has a plurality of resistors, and short-circuits said second signal lines to one another through said resistors.

11. The driving circuit of claim 2, wherein said second drivers drive each of said second signal lines to potentials equal to or greater than a certain center potential while a first plurality of said first signal lines are being driven

to the active level, then to potentials equal to or less than said center potential while a second plurality of said first signal lines are being driven to the active level.

12. The driving circuit of claim 1, wherein said switching circuit disconnects a pair of said first signal lines from corresponding first drivers when both first signal lines in said pair are undergoing transitions between said active and inactive levels.

13. The driving circuit of claim 12, wherein said switching circuit short-circuits the first signal lines in said pair to a potential halfway between said active and inactive levels.

14. The driving circuit of claim 12, wherein said liquid-crystal capacitors have a common electrode to which a certain common potential is applied, and said switching circuit short-circuits the first signal lines in said pair to said common potential.

15. The driving circuit of claim 12, wherein said switching circuit short-circuits the first signal lines in said pair to each other.

16. The driving circuit of claim 12, wherein said switching circuit has a plurality of resistors, and short-circuits said first signal lines through said resistors.

17. The driving circuit of claim 1, wherein said switching elements are thin-film transistors.

18. A method of driving a liquid-crystal display having a matrix of first signal lines aligned in one direction and

second signal lines aligned in another direction, a plurality of switching elements controlled by the first signal lines, disposed at intersections of the first signal lines with the second signal lines, and a plurality of liquid-crystal capacitors disposed at said intersections and coupled through said switching elements to the second signal lines, comprising the steps of:

sequentially driving said first signal lines to active and inactive levels, thereby switching said switching elements on and off at certain transition times;

driving said second signal lines with signals representing picture-element intensities; and

short-circuiting all of said second signal lines at said transition times.

19. The method of claim 18, wherein said step of short-circuiting short-circuits said second signal lines through resistors.

20. The method of claim 18, wherein said step of short-circuiting short-circuits said second signal lines to a fixed potential.

21. The method of claim 20, wherein said fixed potential is a common potential applied to said liquid-crystal capacitors.

22. The method of claim 20, wherein said step of driving said second signal lines drives said second signal lines to potentials alternately above and below said fixed potential.

23. The method of claim 18, wherein said step of short-circuiting short-circuits each one of said second signal lines to an adjacent one of said second signal lines.

24. The method of claim 23, wherein said step of driving said second signal lines drives mutually adjacent second signal lines in mutually opposite directions from a certain center potential.

25. The method of claim 23, wherein said step of short-circuiting short-circuits all mutually adjacent pairs of said second signal lines.

26. The method of claim 18, wherein said step of driving said second signal lines drives one of said second signal lines to potentials equal to or greater than a certain center potential while a first plurality of said first signal lines are being driven to the active level, then to potentials equal to or less than said center potential while a second plurality of said first signal lines are being driven to the active level.

27. A method of driving a liquid-crystal display having a matrix of first signal lines aligned in one direction and second signal lines aligned in another direction, a plurality of switching elements controlled by the first signal lines, disposed at intersections of the first signal lines with the second signal lines, and a plurality of liquid-crystal capacitors disposed at said intersections and coupled through said switching elements to said second signal lines, comprising the steps of:

 sequentially driving said first signal lines to active and inactive levels, thereby switching said switching elements on and off;

 driving said second signal lines with signals representing picture-element intensities; and

 short-circuiting a pair of said first signal lines when

both first signal lines in said pair are undergoing transitions between said active and inactive levels.

28. The method of claim 27, wherein said step of short-circuiting short-circuits the first signal lines in said pair to a potential halfway between said active and inactive levels.

29. The method of claim 27, wherein said liquid-crystal capacitors have a common electrode to which a certain common potential is applied, and said step of short-circuiting short-circuits the first signal lines in said pair to said common potential.

30. The method of claim 27, wherein said step of short-circuiting short-circuits the first signal lines in said pair to each other.

31. The method of claim 27, wherein said step of short-circuiting short-circuits said first signal lines through resistors.

32. A method of driving a liquid-crystal display having a matrix of first signal lines aligned in one direction and second signal lines aligned in another direction, a plurality of switching elements controlled by the first signal lines, disposed at intersections of the first signal lines with the second signal lines, and a plurality of liquid-crystal capacitors disposed at said intersections and coupled through said switching elements to said second signal lines, comprising the steps of:

sequentially driving said first signal lines to active and inactive levels, thereby switching said switching elements on and off at certain transition times; and

driving one of said second signal lines with signals representing picture-element intensities, to potentials on one side of a certain center potential, while a first plurality of said first signal lines are being driven to the active level; then

driving said one of said second signal lines with signals representing picture-element intensities, to potentials on an opposite side of said center potential, while a second plurality of said first signal lines are being driven to the active level.

33. The method of claim 32, further comprising the step of short-circuiting all of said second signal lines during said transition times.

34. The method of claim 32, further comprising the step of short-circuiting a pair of said first signal lines when both of the first signal lines in said pair are undergoing transitions between said active and inactive levels.